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New taxa of Sphingidae (Lepidoptera) from the Philippines

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Abstract: One new species and one new subspecies of the family Sphingidae are described – *Macroglossum* ***integrifasciatum*** **sp. n.** (type locality Mindoro) and *Eupanacra busiris* ***schuetzi*** **ssp. n.** (type locality Leyte). Both holotypes (♂♂) are deposited in the collection of C. G. Treadaway which is assigned to the Senckenberg-Museum, Frankfurt/Main, Germany.

Neue Sphingidentaxa von den Philippinen (Lepidoptera)

Zusammenfassung: Eine neue Art und eine neue Unterart der Familie Sphingidae werden beschrieben – *Macroglossum* ***integrifasciatum*** **sp. n.** (locus typicus Mindoro) und *Eupanacra busiris* ***schuetzi*** **ssp. n.** (locus typicus Leyte). *Macroglossum integrifasciatum* ähnelt *M. semifasciatum* Hampson [1893], unterscheidet sich aber im ♂-Genitalapparat und in der vollständigeren Antemedianbinde der Vorderflügel. *Eupanacra busiris schuetzi* ähnelt *E. b. busiris* (Walker 1856) (Sundaland und Südostasien), zeigt aber ähnlich wie *E. b. atima* (Rothschild & Jordan 1915) (Südindien) nur eine wenig ausgeprägte Grünzeichnung. Beide Holotypen (♂♂) befinden sich in der Sammlung C. G. Treadaway, die dem Senckenberg-Museum, Frankfurt/Main, übergeben werden wird.

Abbreviations:

CGT Collection C. G. Treadaway, assigned to Senckenberg-Museum, Frankfurt/Main

ZMA Zoölogisch Museum, Universiteit van Amsterdam, Amsterdam

Macroglossum ***integrifasciatum*** **sp. n.**

Material examined:

Holotype: ♂, Philippines, Mindoro, Mt. Halcon, 1900 m, 20. iv. 1994, coll. CGT.

Diagnosis. In size and appearance similar to *Macroglossum semifasciatum* Hampson, [1893], but differing in the ♂ genitalia and in the more complete antemedian fascia on the fore wing.

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Description. ♂ (Figs. 1-2). Length of forewing (from base to apex): 28 mm. Maculation of the wings overall more prominent and more complete than in *M. semifasciatum.* All lines clearly visible. Antemedian band of forewing of the same shape as in *M. semifasciatum,* but filled with dark brown over its complete length. Hindwing and undersides of all wings as in *M. semifasciatum.*

Ground colour of body and head dark brownwithout the green scaling of *M. semifasciatum,* but as in this species, head and thorax with a dark mesial stripe. Underside of palps and thorax greyish white. First three abdominal sternites with greyish white mesial patches. Second and third abdominal tergites laterally with small orange spots, the one on the second tergite barely visible. Anal tuft and preceding tergites very dark, almost black. White abdominal side tufts strongly pronounced on the dark ground colour.

♂ Genitalia (Fig. 7). Uncus and gnathos as in *M. semifasciatum* (Fig. 8). Apex of valves less acute than in that species. Harpe slender and attached to the ventral border of the valve for most of its length; apically curved dorsad.

♀ unknown.

Etymology. The epithet *integrifasciatum* is formed from the Latin words INTEGER (compete) and FASCIA (band) to indicate that the species has a complete antemedian band, unlike the similar species *M. semifasciatum* which has only half an antemedian band.

Eupanacra busiris schuetzi ssp. n.

Material examined:

Holotype: ♂, Philippines, Central West Leyte, 3 km E of Visca, 70 m, 5. v. 1994, secondary forest, U.V. light, 8.30 h, leg. P. SCHÜTZ, coll. CGT.

Paratypes: 1 ♂, Philippines, Central West Leyte, 3 km E of Visca, 70 m, 9. v. 1994, secondary forest, U.V. light, leg. P. SCHÜTZ, coll. ZMA; 1 ♀, Leyte, Mahaplag, Mt. Balocaue, 600 m, 10. III. 1986, leg. BORROMEO, coll. CGT; 3 ♂♂, Leyte, Baybay, Visca, 50 m, secondary forest, leg. P. SCHÜTZ, 5. v. 1995 (coll. SCHÜTZ), 2× 12. VI. 1995 (coll. ZMA, coll. SCHÜTZ).

Diagnosis. This subspecies is similar to *E. busiris busiris* (WALKER, 1856), but the overall appearance is much less varied because of the lack of the vivid green colouration of that subspecies. In that aspect the new subspecies is closer to *E. b. atima* (ROTHSCHILD & JORDAN, 1915).

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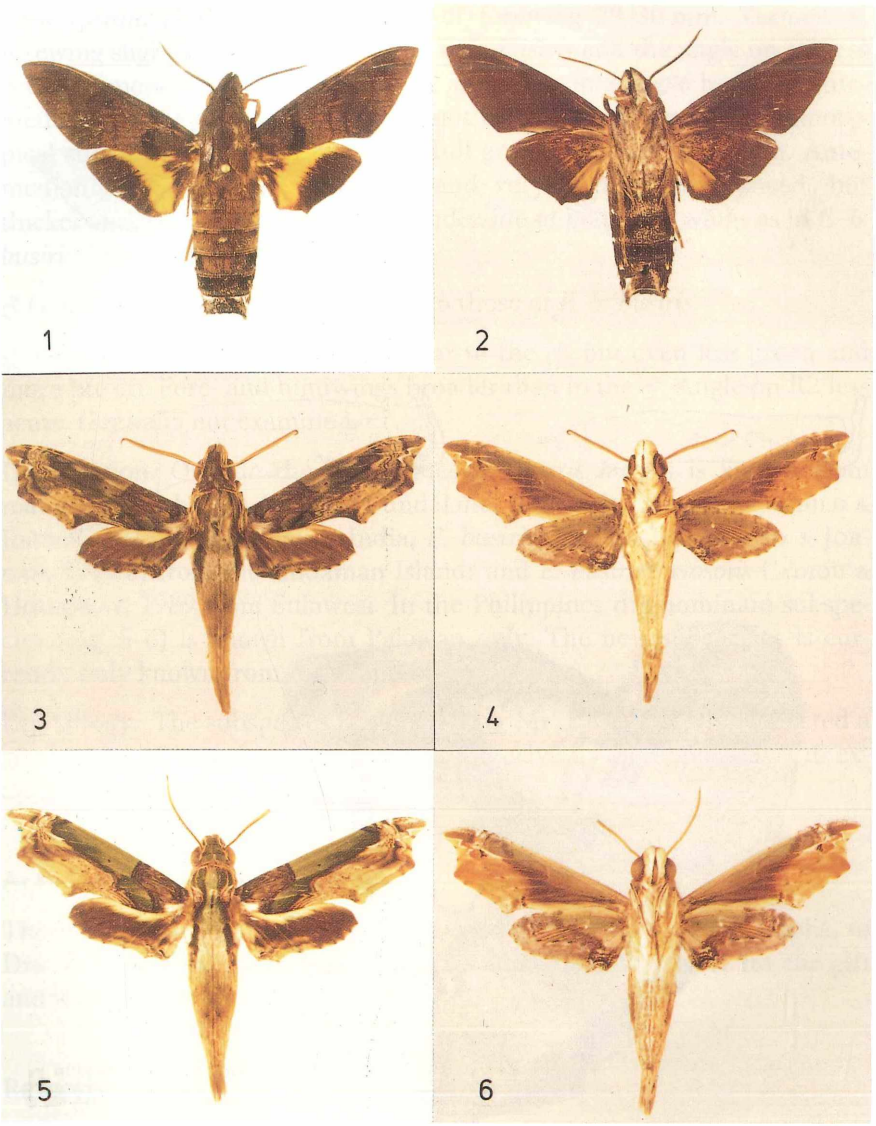

Fig. 1–2: ♂ *Macroglossum integrifasciatum* sp. n., holotype, Mindoro. **Fig. 3–4:** ♂ *Eupanacra busiris schuetzi* ssp. n., holotype, Leyte. **Fig. 5–6:** ♂ *Eupanacra busiris busiris,* Palawan, for comparison.

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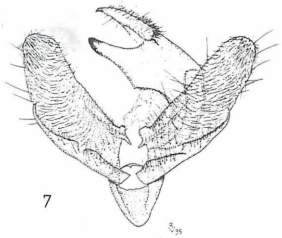

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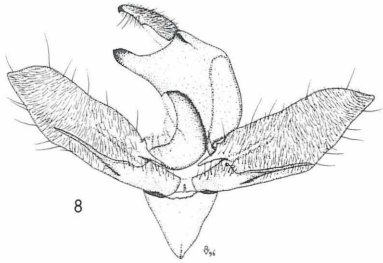

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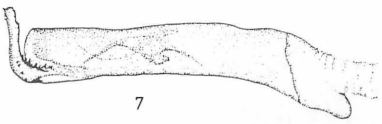

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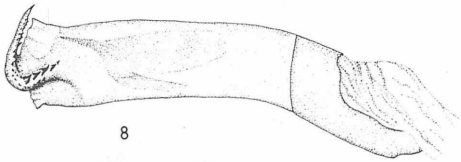

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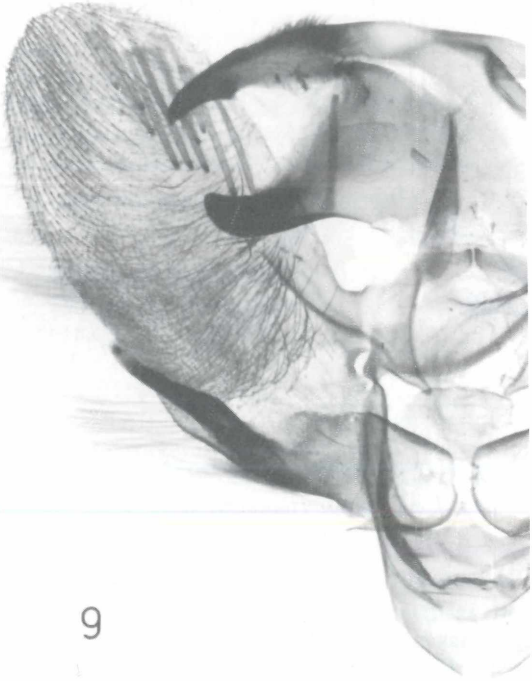

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Fig. 7: *Macroglossum integrifasciatum* sp. n., ♂ genitalia. **Fig. 8:** *Macroglossum semifasciatum*, ♂ genitalia, for comparison.

Fig. 9: *Eupanacra busiris schuetzi* ssp. n., ♂ genitalia.

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Description. ♂ (Figs. 3-4). Length of forewing 29-30 mm. Termen of forewing slightly less sinuate than in *E. b. busiris* and the angle on R2 less acute. Upperside of head and thorax as well as interspace between antemedian and discal lines of forewing not bright green as in the nominotypical subspecies (see Figs. 5/6) but dull green shaded with brown. Antemedian and discal lines not thin and very sharply pronounced, but thicker and with unsharp borders. Underside of body and wings as in *E. b. busiris,* but all colours duller.

♂ Genitalia (Fig. 9) almost identical to those of *E. b. busiris.*

♀. Length of forewing 33 mm. Similar to the ♂, but even less green and more brown. Fore- and hindwings broader than in the ♂. Angle on R2 less acute. Genitalia not examined.

Distribution. Outside the Philippines *E. busiris busiris* is known from mainland South-East Asia and Sundaland, *E. busiris atima* (Rothschild & Jordan, 1915 b) from South India, *E. busiris marina* (Rothschild & Jordan, 1915 a) from the Andaman Islands and *E. busiris myosotis* Cadiou & Holloway, 1989 from Sulawesi. In the Philippines the nominate subspecies (Fig. 5-6) is known from Palawan only. The new subspecies is currently only known from the island of Leyte.

Etymology. The subspecies is named after Mr. P. Schütz who collected a good series of it on Leyte and very kindly gave us the opportunity to examine a larger number of specimens.

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References

Cadiou, J. M., & Holloway, J. D. (1989): Endemic Sphingidae from Sulawesi (Lepidoptera). – Lambillionea 89 (9-12): 130-158.

D'Abrera, B. (1986): Sphingidae mundi – hawk moths of the world. – 226 pp., Faringdon, Oxon (E. Classey).

Hampson, G. ([1893] 1892): Fauna of British India, including Ceylon and Burma, Moths, vol. 1. – 527 pp., London (Taylor & Francis).

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ROTHSCHILD, W., & JORDAN, K. (1903): A revision of the lepidopterous family Sphingidae. – Novit. zool. **9, Suppl.**, cxxxv + 972 pp., 67 pls.

—— (1915 a): Thirteen new Sphingidae. – Novit. zool. **22**: 281-291.

—— (1915 b): Some new Sphingidae in the collection of the British Museum. – Novit. zool. **22**: 291-294.

WALKER, F. (1856): List of the specimens of lepidopterous insects in the collection of the British Museum, part 8, Sphingidae. -- 271 pp., London (Trustees of the BM).

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